

We claim:

1. A method for reducing disease on a crop infected with at least one pathogen, comprising:
  - 5 providing an herbicide resistant crop, wherein the crop is selected from glyphosate resistant wheat and glyphosate resistant soybeans;  
treating the crop with glyphosate at a density of greater than about 1.0 kg/ha of glyphosate, thereby reducing the effects of the pathogen on the crop.
- 10 2. The method according to claim 1, wherein treating the crop comprises at least two separate applications of glyphosate.
3. The method according to claim 2, wherein the more than two separate applications of glyphosate are applied at least about seven days apart.
- 15 4. The method according to claim 1, wherein treating the crop comprises treating the crop with from greater than about 1.0 kg/ha to about 3.0 kg/ha of glyphosate.
- 20 5. The method according to claim 1, wherein treating the crop comprises treating the crop with from greater than about 1.0 kg/ha to about 2.0 kg/ha of glyphosate.
- 25 6. The method of claim 1, wherein treating the crop comprises treating the crop with from about 1.5 kg/ha to about 2.0 kg/ha of glyphosate.
7. The method of claim 4, wherein treating the crop with glyphosate comprises at least two separate applications of glyphosate.
- 30 8. The method of claim 1, wherein the pathogen is a fungal pathogen.
9. The method of claim 1, wherein the pathogen is a foliar pathogen.

10. The method of claim 1, wherein the pathogen is a species of *Rhizoctonia*, *Gaeumannomyces*, *Phakopsora* or *Puccinia*.
- 5 11. The method of claim 1, wherein the pathogen is *Phakopsora pachyrhizi*.
12. The method of claim 11, wherein the crop is glyphosate resistant soybean.
- 10 13. The method of claim 1, wherein the crop is glyphosate resistant wheat.
14. The method of claim 1, wherein the yield is from about 5% to about  
15 20% higher than a crop not treated with glyphosate.
15. The method of claim 1, wherein the crop is glyphosate resistant wheat and the crop is treated with glyphosate at a stage between the 3 leaf stage and the flowering stage.
- 20 16. The method of claim 1, wherein the crop is glyphosate resistant soybean and the soybeans and the crop is treated between emergence and the flowering stage.
- 25 17. The method of claim 1, wherein treating the crop with glyphosate comprises treating the crop with glyphosate prior to the display of a symptom of pathogen presence.
- 30 18. The method of claim 1, further comprising harvesting the crop thereby yielding a harvested crop.
19. A harvested crop produced by the method of claim 18.

20. A method for reducing disease on a wheat crop with at least one pathogen, comprising:

providing an herbicide resistant wheat crop; and

5 treating the wheat crop with an herbicide after emergence of the herbicide resistant wheat crop, thereby reducing the effects of the pathogen on the wheat crop.

21. The method according to claim 20, wherein the herbicide resistant wheat crop is glyphosate resistant.

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22. The method according to claim 20, further comprising treating the wheat crop prior to emergence.

23. The method according to claim 20, wherein the herbicide is  
15 glyphosate.

24. The method according to claim 20, wherein the herbicide is a 5-enolpyruvylshikimate-3-phosphate synthase inhibitor.

20 25. The method according to claim 20, wherein the pathogen is a soilborne pathogen.

26. The method according to claim 20, wherein the pathogen is a fungal pathogen.

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27. The method according to claim 20, wherein the pathogen is a species of *Rhizoctonia*, *Gaeumannomyces*, *Phakopsora* or *Puccinia*.

28. The method according to claim 27, wherein the pathogen is  
30 *Gaeumannomyces graminis* var *tritici*.

29. The method according to claim 20, wherein the pathogen is a foliar pathogen.

30. The method according to claim 20, wherein the pathogen causes  
5 stripe rust, stem rust or leaf rust.

31. The method according to claim 30, wherein the pathogen is *Puccinia striiformis*.

10 32. The method according to claim 20, wherein pathogen activity is decreased for at least 21 days after herbicide application.

33. The method of claim 21, wherein the glyphosate resistant wheat crop is treated with from about 0.5 kg/ha to about 2.0 kg/ha glyphosate, thereby  
15 increasing the yield of the wheat, wherein the yield is at least about 5% higher than a glyphosate sensitive wheat crop.

34. The method according to claim 20, wherein glyphosate is applied at a density of from about 0.5 kg/ha to about 1.5 kg/ha.  
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35. The method according to claim 20, wherein glyphosate is applied at a density of from about 0.5 kg/ha to about 1.0 kg/ha.

36. The method according to claim 33, wherein the yield is from about  
25 5% to about 20% higher.